# IS601 - Web System Development

#### Instructor

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#### **Class Meetings**

Wednesdays from 6:00 PM - 9:00 PM

#### Description

Students will gain experience in the development of web-based systems using Python and the Django web framework. Students will work with Python and Javascript, currently two of the three most in-demand programming languages. Students will learn to develop a web based system through an intensive, hands-on project that requires application of real-world problem-solving skills. Students will learn to utilize the Django web framework, one of the ten most popular web frameworks and currently in use by Instagram and Pinterest. Model-View-Template design, the Django templating language, and object relational mapping for database access will be covered in this course. At the conclusion of the course, students should be able to create a bespoke web interface for a standard internal business application.

### **Evaluation Methods**

Project and presentation	20%
Midterm	20%
Final Exam	20%
Assignments	40%

## Grading

А	90 or above	С	70-74
B+	85-89	D	65-69
В	80-84	F	below 64
C+	75-79		

#### Academic Integrity

Students are expected to follow the <u>University Policy on Academic Integrity</u>. Any code used from an online resource should be cited in a comment. Any attempts to present other people's code as your own will be viewed as plagiarism. All violations of the Academic Integrity policy will be referred to the Dean of Students for review and possible disciplinary action.

#### **Class Policies Reminders**

Please do not be late!

2 absences: At least one grade point deduction. Excessive lateness to class: Possible grade reduction. If your final grade is supposed to be A, it will be downgrade to B+.

4 or more absences: Failing grade.

Late/missing/incomplete assignments: Possible grade reduction. It will be up to the instructor to access your late assignment.

Apply only if we have a project: Failure in-group commitments: Possible grade reduction. Your group members will evaluate you via a confidential survey. There MIGHT be an opportunity for extra credit to increase your grade.

\*If you miss three class sessions, you will automatically be deducted a final letter grade. Receiving an A in the class will not be possible. If you are late excessively to class, you will automatically be deducted a final letter grade. Receiving an A in the class will not be possible. If you miss five class sessions, you will automatically fail the course.

#### **Tentative Class Schedule**

This class schedule is tentative and subject to change as the course develops.

Week	Topics
1	<ul> <li>Course Introduction</li> <li>Project Introduction</li> <li>Presentation - Tools Used in Modern Web Development</li> <li>Exercise - Setting up the Development Environment</li> </ul>
2	<ul> <li>Presentation - Working from the Command Prompt / GitHub</li> <li>Exercise - Navigation Practice/Basic git workflow</li> </ul>
3	<ul> <li>Presentation – HTML &amp; CSS</li> <li>Exercise and assignment 1</li> </ul>
4	<ul> <li>Presentation – bootstrap, DOM, and JavaScript</li> <li>Lab and assignment 2</li> </ul>
5	<ul> <li>Presentation - Beginning of python (conditional statement and loops)</li> <li>Midterm Q/A</li> </ul>
6	Midterm Exam
7	<ul> <li>Presentation - Beginning of python (functions and I/O)</li> <li>Lab</li> </ul>
8	<ul> <li>Presentation – intro to Django (setup, URL mappings, statics files)</li> <li>Exercise and Assignment 3</li> </ul>
9	<ul> <li>Presentation – Django (templates, views, models)</li> <li>Lab</li> </ul>
10	<ul> <li>Presentation - Django (Routing, Validation, Forms)</li> <li>Lab</li> </ul>
11	<ul> <li>Presentation – Django (Django Deployments)</li> <li>Assignment 4</li> </ul>
12	Final Q&A
13	Project Presentations
14	Project Presentations
15	Final Exam